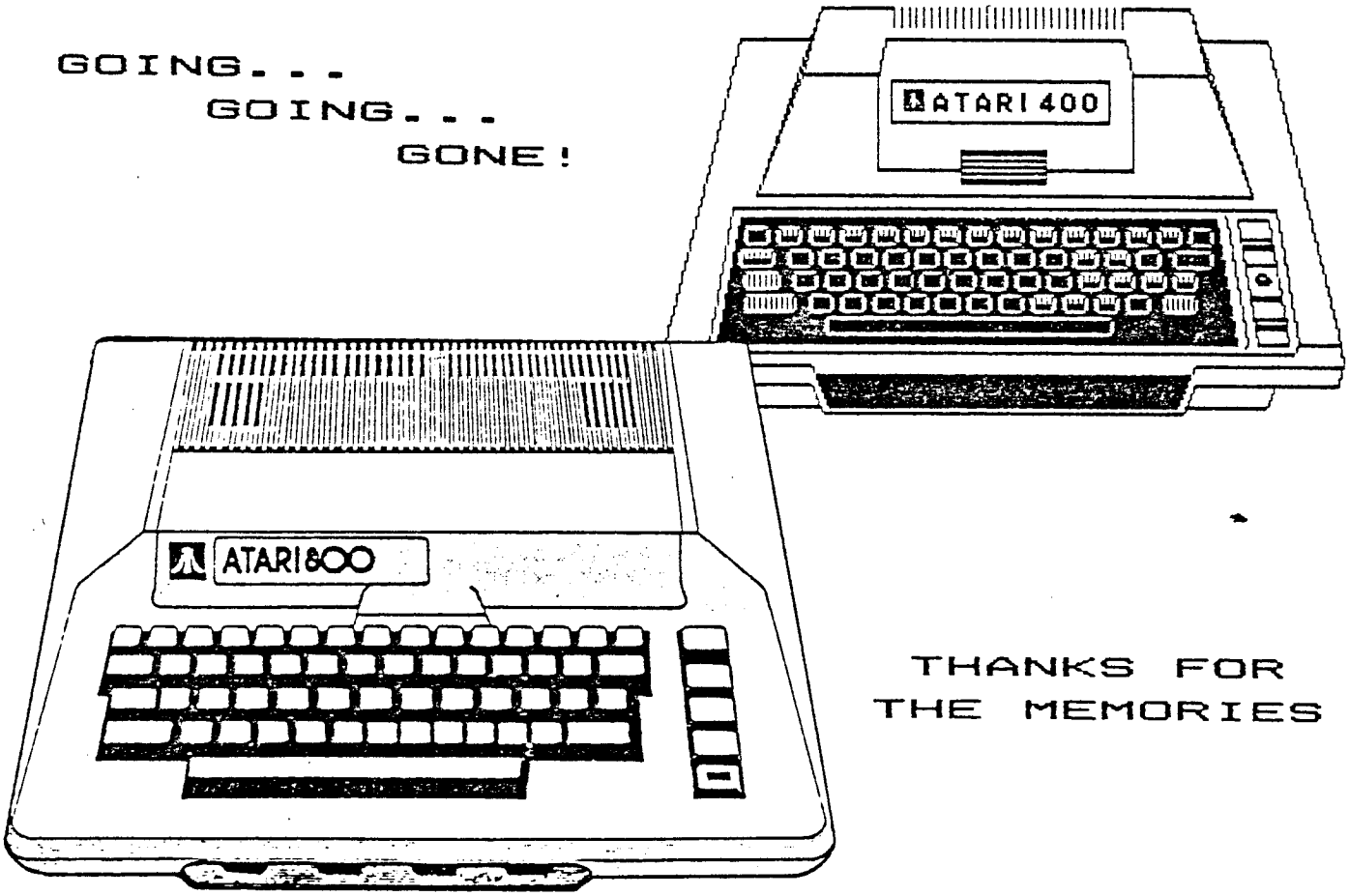
DAL-ACE

DALLAS ATARI COMPUTER ENTHUSIASTS

VOLUME 4 ISSUE 9 SEPT 1983

GOING...
GOING...
GONE!



THANKS FOR
THE MEMORIES

PRESIDENT'S PERSPECTIVE

As most of you know by now, we have moved into our new meeting place. It comes as no surprise that some think it was a good move and others see it as not. My personal feelings are that I would like to see the club move to the North Dallas area around 635 & Midway. The only problem with that is the price of a meeting place. The Lions Club is only a means to solve a serious problem we had at the Holiday Inn: that of little room.(We have over 425 members now). So don't give up and not come to the club meeting because of the long drive, we are changing the format of the meeting to give you something worth the drive.

If you haven't looked at the back of the newsletter yet, we have a new editor. Jim Chaney has agreed to fill the position after Harry resigned this month. Harry had been editor for over two years. I would like to thank Harry for doing a great job and we all need to give him a 'done good' hand shake.

Starting with the next meeting, we are changing the procedure for dealers selling at the meeting. If you wish to sell as a dealer, contact me for rules and information. If you don't, you may be refused. Just remember, it is not a *right* under the constitution to sell at the meeting.

For a long time now, I have asked the members NOT to call me at work. There are times when I'm with customers doing a demo and can't be disturbed. Other times I'm in the middle of an important project for my boss. Some dealers are giving out my work number and I'm asking them to please stop. I'm asking my secretary to start asking if the call is business are not. Along the same line, I DO work for a living and Atari isn't it. The computer is my hobby. If you do call my house and I'm not there, leave a message and I will get back in touch with you. My wife has nothing to do with the club so don't get mad at her if she can't answer your questions. The best time to call is 5PM through 9PM weekdays and 10AM through 9PM weekends. Don't call after 9PM.

We are starting up a new CP/M SIG. If you are interested, check the inside, back cover of this newsletter for the meeting date, place, and time.

Happy Computing, Gary

IDEAS FOR ATARI PROGRAMMERS

by TOM SCHAEPER

A couple of months ago, I mentioned my list of programs for the Atari that I hadn't gotten around to programming yet. Here is that list. This is by no means complete or even a small summary of what can be done with the Atari by the creative programmer. If you need some ideas to start with, then, here is one man's list.

I. Personal Productivity Tools
- The entire Visi-series needs to be recreated for the Atari.
- Need an inexpensive version of a spreadsheet (costing less than $100).
- A real database system like dBASE II.
- Integrated packages like Lotus 1 2 3.

II. Business Packages
- I have not seen a really excellent bookkeeping system.
- I personally could use a professional time & billing package.
- Occupationally specific packages like for dentists, doctors.

III. Systems Development
- An APL interpreter.
- A FORTRAN compiler.

IV. Game Development systems
- Player-customizable chess game.
- Adventure writing program (graphics or text).
- Something equivalent to Arcade Machine for the A--le.
- A way to create additional screens for Jumpman or Wayout.

V. Games
- TAPS simulation.
- Simulation of any classic board game (Twixt, Risk).
- Dominoes (Forty-Two).
- Eastern Front in space.

VI. Education
- Historical Adventures
- Computerized chemistry or physics lab.
- Math drill for UIL competition.

Well, that should be enough to get you started. I would be thrilled to see all these demonstrated at the next meeting, so get cracking!

NEW FORMAT ???

With the current rage for DS/DD disk drives and Mr. Merslett's super-duper DOS, it was only a matter of time before the cry for a DOUBLE SIDED, DOUBLE DENSITY *NEWSLETTER* was echoing across the Metroplex. So, here it is! "Get out your specs, maw, they done went and done it to us!" Of course, everyone knows that this type of formatting requires two (2) write-heads, RIGHT? Well, we now have two "light-headed" editors, and may the CPU be with us as we charge off into a new adventure!

FAREWELL
by HARRY HAFELE

This is my last newsletter as the editor. I have really enjoyed being the editor and wish my successor the best. Since I joined the group, we have grown almost tenfold. The first meetings that I attended were in the showroom of a computer store and everyone brought their own chair if they wanted one. It was more like a SIG group is today.

We are much larger now and much more diverse. We are a growing club and as such are subject to growing pains. The leaders that we have continue to do an outstanding job, but it could be a lot better if they had more help. The SIGs seem to be where the action is today. I have a great fear that come January the current slate of officers will resign because they have done the job of leading the club for so long. The call will go out for volunteers to take over and give new energy and direction, and we will end up with no one. At that point the club will cease to exist and we will all go our separate ways.

Now I've met a lot of new friends through the club and learned one hell of a lot about my computer. Anyone who owns an Atari must be crazy not to join just to have access to the club library, the bulletin board, and the vendors who come to the meetings and give us such good prices. But things like this don't just happen, and the people doing the job today cannot continue to do so forever. So volunteer to help, even if it is nothing more than putting the chairs away at the end of the meeting.

I don't know what got me started on all this. I hope everyone has enjoyed the newsletters since I have been the editor, and I hope that we will have newsletters for years to come. I will be at the meetings and would be happy to talk and listen to anyone who has ideas on what they think would be good for the club. See you around.

THANKS
by JIM CHANEY & SANDY GADELL

Thank you, Harry, for a job well done and for helping us with our first issue of the DAL-ACE Newsletter. Harry has our highest commendation for his outstanding dedication and loyalty. He has put forth a tremendous effort and deserves our highest regards.

We would be remiss if we did not seize this opportunity to solicit the support of each member in making our newsletter representative of the high standards characteristic of the ATARI. That is, send us your contribution to the Newsletter and let us know what you want to see published. This applies to both new and old (experienced) members. To be totally *blunt* about it, speak up or shut up!

PRSOS
by SANDY GADELL

Now that I have your attention, I'll apologize for the sneaky way I went about getting it. You probably thought PRSOS was an exciting new Greek computer game about adventure on the high seas where your job is to board a yacht and protect Jacqueline Kennedy Onassis from the simultaneous attacks of money-grubbing stockholders, on the one hand, and Ari's lovely daughter on the other, while pirates surround you and threaten to sink your ship if you don't immediately abandon your joystick.

Sorry about the misunderstanding. (Also about the length of the preceding sentence!)

Actually, PRSOS is a P.R. S.O.S., and since we all know what P.R. and S.O.S. stand for, it doesn't take long to conclude that the DAL-ACE P.R. person needs your help yesterday, if not sooner.

You heard right (with your very own eyes!) We now have a P.R. department -- which, for this very brief moment in time, is me -- and I need all the help I can get. Here's what you can do:

- Send me the calendar section of any local/regional newspapers that you know about. Include the address of the paper, publication dates for the calendar section, name of calendar editor, etc. We want to send out information about DAL-ACE to as many sources of new members as we can.

- Talk to great hordes of people about the group. We want to make it into a very strong organization so that we can afford to rent a larger facility which will hold us until we move into the Convention Center.

- Send me your ideas about getting publicity for the club. User Power can't be beat. Be sure to nag your friends about helping us get to be a very well-known group in the area.

- We'll be getting involved in some newsworthy events, and would like to have some volunteers to participate in these. We're going to carry our Atari's out into the world to do good things, and we're sure that these efforts will be getting us lots of attention from the media. Please let me know if you'd like to help with any of these wild adventures.

Don't be bashful about sending your ideas. If you're a bit shy, send them anonymously in a plain, brown envelope. No idea is going to be regarded as too crazy to be considered. However, please send them to me in care of the Newsletter address as indicated on the back cover. I have a minor child at home.

[EDITOR'S NOTE: Information about the public relations volunteer group will appear as a regular column in this newsletter under the title "Power Up." If you don't find it under there, look under the carpet, where it has most likely been swept.]

EDUCATION UPDATE: LANGUAGES FOR ALL OCCASIONS

by JEFF RUTHERFORD

You have probably noticed that there are a number of programming languages available for your ATARI computer. "Why doesn't somebody develop a standard, all-purpose computer programming language?" you ask. In fact, IBM tried to develop such a programming language in the 1960's, called PL/1. PL/1 gained only modest acceptance because it was too big and unruly. It contained so many functions and features that only mainframes and a few mini computers could run it. Since PL/1 was developed, hundreds of programming languages have been created, each more suitable than others for certain applications. Many of the best languages developed are available for your ATARI computer. This month I will introduce you to a number of programming languages that are available, and in future articles, I will discuss each of these languages in a little more detail and include a sample program written in each language.

Here are a few of the major languages I will be discussing in the coming months:

BASIC - The de facto standard microcomputer language, BASIC is easy to learn and use. There are many dialects available for the ATARI, including Atari BASIC I and II, Microsoft BASIC, BASIC A+, and several BASIC compilers. (A compiler translates BASIC code into assembly language.)

PILOT - If you are interested in writing interactive instructional programs, PILOT might be for you. Designed with teachers in mind, this language is most suitable for developing computer aided instruction programs. Atari PILOT also has "turtle" graphics capability.

FORTH - This language is my personal favorite. It executes very fast, consumes relatively little memory, is extensible (you can define functions that become a permanent part of the language), it is easy to debug, and is more interactive and much less painful to learn than assembly language. FORTH programmers tend to be fanatical in their devotion to this language - myself included.

PASCAL - I know of two versions of this language for the ATARI. One version from APX requires two disk drives, and the other version by DAL-ACE's own Norm Draper requires one drive. PASCAL is widely taught in colleges and universities, because it is a modular, structured language. PASCAL allows the creation of data structures and types, in addition to the usual strings and arrays found in BASIC.

C - This one is known as the "programmer's language". C is terse, flexible, and fast. It doesn't have a lot of built in functions or "friendly" features, but it is especially suited for writing compilers and operating systems like UNIX.

LISP - LISP is a string processing language that has found its way into the artificial intelligence laboratories of major universities and corporations. LISP is well suited for manipulating text strings.

LOGO - I am excited about the new ATARI LOGO cartridge. LOGO was developed at MIT by Semour Papert as a language to introduce children to computers. LOGO is much more than a mere "kiddie language", and I believe that it may be the language that will best showcase the graphics and sound capabilities of ATARI computers.

NEXT MONTH - More on LOGO.

** REPRINTED FROM **
LOMPOC/SANTA MARIA
ATARI COMPUTER USERS' GROUP
JUNE, 1983, NEWSLETTER

Graphics Fun

by MIKE McLAREN

For some fun in GRAPHICS Modes 9, 10, or 11, type in this program, follow the instructions and enjoy the show.

```
10 A=8:GOTO 130
20 X=0:Y=0:XP=78:YP=190
30 A=A+1:IF A=12 THEN A=9
40 GRAPHICS A
50 COLOR X:SETCOLOR 2,0,0
60 X=X+1:IF X=78 THEN X=0
70 XP=XP-1:IF XP=0 THEN XP=78
80 Y=Y+2:IF Y=190 THEN Y=0
90 YP=YP-2:IF YP=0 THEN YP=190
100 PLOT X,Y:DRAWTO XP,Y:
DRAWTO XP,YP:DRAWTO X,YP:DRAWTO X,Y
110 IF PEEK(53279)=5 THEN 20
120 GOTO 50
130 GRAPHICS 17:COLOR 0:
SETCOLOR 2,0,0
140 POSITION 0,2:
? #6;"PRESS start TO BEGIN"
150 POSITION 3,8:
? #6;"PRESS select TO"
160 POSITION 4,11:
? #6;"CHANGE MODES"
170 IF PEEK(53279)<>6 THEN 170
180 GOTO 20
```

[*DAL-ACE EDS:* Don't miss this one! It's one of the best little displays We have seen!]

STRINGS
by JEFF GOLDEN

The following program draws some elegant string-art designs on the television screen. It was adapted for the Atari from an IBM-PC program that was written by Patrick Leabo. The variety and beauty of the designs is truly amazing when one considers the simplicity of the program. Everything is done with a few adds and subtracts.

```
10 GRAPHICS 24:COLOR 1
15 SETCOLOR 2,6,4
20 SETCOLOR 4,6,4
25 FOR K=1 TO 185
30 X=X+1.5:IF X>310 THEN X=X-130
40 X1=X1-1.9
45 IF X1<5 THEN X1=X1+310
50 Y=Y-2:IF Y<5 THEN Y=Y+180
60 Y1=Y1+1.9
65 IF Y1>180 THEN Y1=Y1-180
70 PLOT X,Y:DRAWTO X1,Y1
75 NEXT K
80 FOR K=1 TO 1200:NEXT K:GOTO 10
```

BASIC COLD START

How many times have you "RE-BOOTED" by flipping the computer off and then back on again? Does this procedure worry you? Is it bad for the computer? I'm not sure how "bad" it is for the computer, but it did worry me! There is another way to generate a "COLD START". If you have BASIC installed ....

type POKE 580,1
press RETURN
press SYSTEM RESET

GUILT

This is the worst human emotion possible. No one should ever make another person feel guilty. It's the unkindest cut of all.

However, ...

...since most of us are almost sure to pick up a little guilt somewhere along the way anyhow, we figure we might as well channel yours in a useful direction, so here's what we expect you to do:

Please feel just a little teeny tiny twinge of guilt if you don't bring a new member to next month's meeting.

USER POWER -- it's everyone's privilege and everyone's responsibility.

LOOK, COMPUTER, NO HANDS!
by SANDY GADELL

Good news is definitely in store for those of us who seem to be all thumbs when it comes to using using a computer keyboard. Scientists are exploring the use of hardware and software devices which will enable brain waves to act on computers.

Although it will probably be many years before those of us who do our programming in the basement or the garage will have access to these systems, their potential is very exciting and their development is definitely worth following. According to Judith Becker (OMNI, July, 1983) brain controlled computers will have a wide range of user applications. For example, a pilot will be able to maneuver a plane even though his/her arms are pinned down by high-g forces, and a person who is so handicapped as to be unable to speak will be able to use the system to communicate and to operate robots.

Software programs are under development which will enable computers to analyze the electrical patterns of the brain. To use such a system, electrodes are placed on the head in much the same way that they are for an electroencephalogram. Then the computer flashes certain light patterns on a screen, and reads the brain wave responses to these patterns.

Much of the work which is being done on such a system can be credited to inventor Erich Sutter, a scientist at the Smith-Kettlewell Institute in San Francisco. His work is focussed on helping the handicapped learn to communicate better. Previous systems for the handicapped have been very costly and have been based on eye-tracking. Sutter's approach will be more accurate and at the same time less expensive. Sutter anticipates that it will probably be put on the market for less than $5,000.

For more information about brain controlled computers, read "Artifical Computers" by Judith Becker in the July, 1983 issue of OMNI

BEGINNER'S BYTES

True or False: RAM and ROM are acronyms for "Really A Mess" and "Running Outta' Memory".

Answer: False. RAM stands for "RANDOM ACCESS MEMORY". It's the part of the computer's memory that you can fool around with... you can write stuff, read stuff, store stuff, and print stuff. ROM, however, is "READ ONLY MEMORY". It's already been written on, and it's been sealed up so you won't accidentally mess up the instructions your computer needs in order to do its job.

** REPRINTED FROM **
ATARI COMPUTER ASSOCIATION OF ORANGE COUNTY
MAY, 1983, NEWSLETTER

BOOT DISK FORMAT
by GREG BEAUTON, A.C.A.O.C.

This article is in response to a question at the April meeting! How do you create a boot disk? Understanding the boot file structure is necessary in writing and deciphering boot-loaded programs. A boot disk has the most rudimentary file structure possible for disk access, and the most restrictive. Sector #1 has a special significance in boot files, and contains all the information needed to continue the boot process. The format of this sector is:

byte 0: boot flag (0 for boot file)

byte 1: # of sectors to load

byte 2: address of boot code (two bytes)

byte 4: initial address of application program

byte 6: machine code, executed after loading

These bytes are read by the ROM-resident disk handler. This handler is limited to 128 bytes per sector and will only load consecutive sectors into consecutive memory locations. Since only one byte is allotted for the number of sectors, only 32K can be booted in a "single stage" boot. Many applications require a two stage boot (i.e., DOS 2.0), which simply means that the resident disk handler loads in a new RAM-resident disk handler. DOS 2.0 has a three sector boot, which consists of the normal one sector boot which loads in two more sectors containing a more extensive handler. In turn, this handler loads in the rest of DOS. This new disk handler can access 128 or 256 byte sectors, needed for use of double density disk drives (designed for the now non-existent 815 drive). The initial one sector boot code can be placed anywhere in memory (the address at byte 4 and 5) as long as it does not conflict with the operating system. After loading this single sector, a JSR to the code at byte 6 is made by the resident handler. This code can be the start of the application program, initialization code, or simply a JMP to the program's initial address.

If you are going to disassemble boot files, you will need a program which will retrieve single sectors and place them in a safe memory location. The October '82 newsletter lists a routine which will perform this. Of course, start with sector #1. If you are writing a booted program, the routine must be extended to write the entire program to disk. Binary files created by most assemblers will not boot directly since they are written in DOS 2.0 format.

INVISIBLE CURSOR

POKE 752,1 makes the CURSOR invisible! POKE 752,0 will return the CURSOR to visibility.

SOFTWARE PROTECTION ABSOLUTELY FREE!

I TOLD A FRIEND AND HE TOLD A FRIEND AND SHE TOLD A FRIEND AND HE TOLD A FRIEND AND SHE TOLD A FRIEND ...

And the next thing you know, my terrific still-under-development software idea was for sale in my friendly neighborhood computer store.

Sound familiar? We hope not, but it's happened often enough to make us very thoughtful about the potential alternative futures of our work-in-process and what we want to do about protecting it.

From a legal standpoint, there are a number of alternatives to explore -- copyrights, contracts, patents, nondisclosure agreements, etc. -- but all of these have drawbacks. One problem is that it takes a lot of time to fool around with them. That, however, is not the main obstacle. The heart of the problem resides not in the heart at all, but rather, in a different part of the anatomy altogether. It's most probably a faulty connection in the wire which runs from the brain to the jawbone.

Whoever said that pride goeth before a fall must have known a whole lot about software writers way back when the computer was only a gleam in the APPLE of the eye.

The fact is, when we've "done good", we like to talk about it, even when the good is only half done. And besides, it really doesn't hurt to tell a friend ...

Or does it? --EDS.

MARGINAL MOVES

Memory location 82 controls the screen left margin. The program below illustrates how this location can be used "on the fly" to control screen printing.

```
10 FOR N=0 TO 37
20 POKE 82,N:PRINT N
30 NEXT N
40 FOR N=37 TO 0 STEP -1
50 POKE 82,N:PRINT N
60 NEXT N:POKE 82,2:END
```

Note that "2" is the default setting for the left margin and that "0" is a valid value for the left margin.

OLD COMPUTERS NEVER DIE, THEY JUST CASH IN THEIR CHIPS

Due to technical problems, the Whiz Kid review in last month's issue had numerous typographical errors. It is being reprinted in its entirety in this month's issue. The DAL-ACE editorial staff apologizes to Dr. Cobb for any embarrassment it may have caused him.

* * * * *

EDUCATIONAL SOFTWARE REVIEW

WHIZ KID
by ROMOX

REQUIRES 8K, CARTRIDGE, JOYSTICK, KEYBOARD
PRICE $41.50
REVIEWED BY Harvey Cobb

Whiz Kid is a one or two player graphic hockey game that also has some educational value. You use a joystick to control a character that is holding a hockey stick. Your character is on a skating rink filled with blocks of ice. Each block of ice has a letter on it. The objective is to use your character to rearrange the blocks until they match the word that appears on the bottom of the screen. Also on the screen are three computer controlled goalkeeper characters that chase your character. If your character is touched by one of the goalkeepers, your character loses one of three lives. You are awarded points for matching the word and for hitting the goalkeepers with a block of ice.

You have a number of options. You may choose the word match or a mathematical equation match. You also have the option to use the preprogrammed words and equations or to type in a list of your own words or equations. You have a choice of five levels of difficulty. The higher the number, the faster the movement of the characters.

Whiz Kid can be played by anyone old enough to use a joystick. The educational value is geared for preschool aged children. The gaming strategy and design is geared for preteens.

BASIC DIRECTORY

by GARY SEWELL

This program allows you to output a directory from any diskette to the screen while running a BASIC program. The steps are:

1. Include the program in your BASIC program and be sure to include line 0.

2. In your program where you wish to output a directory, do a GOSUB 30005.

3. Answer the questions, and the directory will appear on the screen.

4. Be sure to include that RETURN at the end of the program. Good luck.

```
0 DIM A$(2000),B$(20),Q$(1),DISK$(20),
DRIVE$(1)
30005 L=PEEK(82):R=PEEK(83):REM ......
REMEMBER THE OLD VALUES OF THE MARGINS
30006 C=35:D=16:E=15:REM VALUES FOR
                              DOS 2.0S
30007 IF PEEK(1818)=32 THEN C=37:D=17:
E=16:REM VALUES FOR MYDOS V3.XX
30010 POKE 82,2:POKE 83,C
30020 ? "}WHICH DISK DRIVE..";:INPUT D
RIVE$
30030 ? "PRESS RETURN";:INPUT Q$:A$=""
30040 DISK$="D":DISK$(LEN(DISK$)+1)=DR
IVE$:DISK$(LEN(DISK$)+1)=":*.*"
30050 OPEN #1,6,0,DISK$:REM OPEN DISK
                UP FOR DIRECTORY OUTPUT
30060 TRAP 30100
30065 REM  GO AND GET DIRECTORY
30070 FOR T=1 TO 64
30080 INPUT #1,B$:A$(LEN(A$)+1)=B$:B$=
"":REM THIS BUILDS STRING TO
         HOLD DIRECTORY
30090 NEXT T
30100 CLOSE #1
30105 REM THE FOLLOWING PRINTS THE
          DIRECTORY
30110 ? "}":POSITION 10,0:? "DIRECTORY
 OF DRIVE..";DRIVE$:? :? A$(1,LEN(A$)-
D)
30115 REM THIS PRINTS THE FREE SECTORS
30120 ? A$(LEN(A$)-E,LEN(A$))
30130 POKE 82,L:POKE 83,R:REM RETURNS
                              OLD VALUES
30140 REM  PLACE A RETURN COMMAND HERE
```

** REPRINTED FROM **

ATARI COMPUTER ASSOCIATION OF ORANGE COUNTY

Here is a list of BBSs around the country.

FORMAT	NAME	PHONE NUMBER
AMIS	Itsy Bitsy	408-298-6930
AMIS	GFXBBS	408-253-5216
AMIS	MACE	313-589-0996
AMIS	SPACE	206-226-1117
AMIS	NEVADA	702-733-9466
AMIS	A2-D2 BBS	509-582-5217
AMIS	C.I.D.	408-244-6229
AMIS	ARCADE	313-978-8087
AMIS	APOGEE	305-238-1231
AMIS	SPACE	206-228-9401
AMIS	CHICAGO	312-789-3610
AMIS	MLBBS	608-251-8538
AMIS	Michigan	313-868-2064
AMIS	Michigan	616-241-1971
AMIS	Starbase 12	617-876-4885
AMIS	Denver	303-758-6233
AMIS	Los Angeles	213-638-3204
AMIS	Ohio	614-866-8889
AMIS	Software City	408-866-4224
AMIS	San Jose	408-942-6975
ARMUDIC	Washington DC	202-276-8342
ARMUDIC	ACE Oregon	503-343-4352
ARMUDIC	New York	212-598-0719
ARMUDIC	Ohio	216-582-2797
ARMUDIC	Maryland	301-587-2132
ARMUDIC	Oklahoma	405-722-5056
ARMUDIC	Pittsburg PA	412-655-2652
ARMUDIC	Santa Ana, CA	714-973-2086
ATABBS	Georgia	404-252-9438
ATABBS	Georgia	404-434-1168
ATABBS	Georgia	404-953-8431
ATABBS	Washington	509-575-7704
NASA	GAS-Net	301-344-9156
Stuart	Sunnyvale	408-749-1872
TIMECOR	Intl Modem Ex	617-738-5051
ATARI	SACR.CA	916-363-3304
ATARI	B.R.,LA	504-273-3116
ATARI	MAINE	207-839-2337
ATARI	JERSEY	201-377-4084
ATARI	PHILA.PA	215-836-5116
ATARI	VIRGINIA	804-898-7493
ATARI	MICH	313-978-8087
ATARI	CHICAGO	312-789-3610
ATARI	MIAMI(rb)	305-238-1231
ATARI	WISC.	608-251-8538
ATARI	MASS.	617-876-4885
ATARI	(UNKNOWN)	213-657-8628
ATARI	WVAUG	213-783-8373
ATARI	TABBS	213-366-2125

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ATLANTA COMPUTER SOCIETY
NEWSLETTER, JULY, 1983

ATARI'S VERSION OF CPM
by Vic Healey

Atari will introduce something that may be of interest to many folks this fall. This is version 2.2 of CP/M for any Atari system that has a disk drive. Yes even the Atari 400 with an old 810 disk drive will be able to run CP/M. Since I personally think this is one of the best desisions to come from Atari in recent months I have spent several dollars and many phone calls trying to learn more about what they have in mind.

I discovered from INFOWORLD that Atari is not really manufacturing this new peripherial. Add-on Computer Corporation located at 2363 Boulevard Circle #25, Walnut Creek, CA 94595 is the manufacturer of this equipment for Atari. Anne Wendling provided me with the following when I called her for information for this newsletter.

The Atari CP/M MODULE is an external microprocessor upgrade (Z-80 at 4 MHZ with 64K ram) to allow CP/M software to be used with the Atari 600xl, 800xl, 1400xl, and 1450xld Home Computers. The Atari CP/M MODULE is fully compatible with the Atari 810 and 1050 Disk Drives. Its built in interface hooks directly to any Atari Home Computer's serial port. Built into this module is a video card that allows for either 40 or 80 columns of video. A monitor output is provided so this unit will not be using the video capabilites of the Atari itself. There is reportedly a serial input/output port provided by this module. CP/M software will be provided by ADD-ON SOFTWARE, INC of Lafayette, CA 94549. This is a direct marketing organization. They will provide all the top selling CP/M software in - ATARI FORMAT (more on this gottcha in a related article.)

They will provide Spreadsheets, wordprocessors, data base managers, languages, utilites, and productivity tools. Since they expect to be unloading this software on the first-time user, who dosen't relealize the impact of the gottcha, they promise to provide a catalog in easy to read format that helps one to understand the software capabilites of the machine. Each package is fully explained with pictures, screen shots or graphics and paragraphs of text so the user can evaluate the capabilites before he buys. A toll free number will be avaiable for ordering. I guess Atari gets a percentage for the use of their markiting organization.

Do I think this is a good value? Depends. Since the CP/M is in Atari format, I am not so sure. I don't like the idea that it precludes adding standard drives and reading standard disks like the Atr8000 does. I don't like the fact that it can't be used with 8" disk drives. I don't like the idea that all CP/M software for this comes from Add-on Software in a direct marketing manner, one will not be able to walk into Software City or Software Atlanta or Programs Unlimited and buy a special program in CP/M format. DBASE 2 is very powerful for example but I believe it should be sold to the non hobbiest by a vendor that can explain how to take full advantage of the package! This requires some time on the vendors part. That is what these software speciality stores are very good at and it justifies the prices that they charge for the software. To pay the same prices or more via mail order and not get the same support is a rip-off.

Most CP/M disks will run on the ATR8000 via a configuration program that I have recieved from SWP. Computers like the Kaypro also can do similar tricks. Obviously Atari isn't going to allow Osborne disks or any other to run on their equipment. The vast library of CP/M software maintaned by the Atlanta Computer Society simply will not be avaiable for the most part to those that have purchased this particular item. The same is true of those that have purchased the CP/M option to the Vic 64 from Commodore. CP/M on the Vic 64 is supposedly in a weird Commodore format. There are ways of getting around these restrictions but they are time consumming and depend on someone with a decent system helping you. Programs can be transfered over the telephone for instance using the Ward Christianson protocol. I estimate that to transfer just one of my 390K disks would reguire about four hours at 300 baud!!! EXCEPT you will be in ATARI FORMAT and you may not even be able to store 390k on one of your CP/M disks! This is a certainty if you are using an old 810 from Atari as the maximum file size this unit will handle is about 90K per disk. Single sided single density in CP/M is a joke! Ask any serious user of the Osborne 1 that hasn't upgraded to double density. The minimum pratical size for CP/M on five

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inch disks is 190K in double density format with dual double density double sided drives of 390K each if you want to do anything serious with it in my opinion. Each standard eight inch CP/M disk holds 256k in single density mode. To move one eight inch disk to five inch and have it fit on just one disk you need to be able to write to both sides of the five inch disk which happens to be 256K of formatted storage in single density mode.
Anyone interested in CP/M and using the ATARI also should check out the SWP MICROSYSTEMS offering before buying ATARI's official version.

COLORFUL POKES

by JIM CHANEY

In GRAPHICS 0, the basic text mode, the screen colors are controlled by three memory locations. I prefer to "POKE" these locations directly, rather than use the "SETCOLOR" command. Why? Aside from poor memory (MINE, not the computer's) the execution time is slightly faster and less program memory is required. The "POKE" values should be even numbers (2, 4, 6, etc.). The range of values for each color is listed below. The lower values in each range produce the darker shades and the higher values produce the lighter shades.

LOCATIONS: POKE 709 FOR TEXT COLOR
POKE 710 FOR MAIN SCREEN COLOR
POKE 712 FOR SCREEN BORDER COLOR

COLOR VALUES

000 --> 014 BLACK TO WHITE
016 --> 030 LIGHT ORANGE
032 --> 046 ORANGE
048 --> 062 RED-ORANGE
064 --> 078 PINK
080 --> 094 RED-PINK
096 --> 110 PURPLE-BLUE
112 --> 126 BLUE-PURPLE
128 --> 142 BLUE
144 --> 158 LIGHT BLUE
160 --> 174 TURQUOISE
176 --> 190 GREEN-BLUE
192 --> 206 GREEN
208 --> 222 YELLOW-GREEN
224 --> 238 ORANGE-GREEN
240 --> 254 LIGHT-ORANGE

Pressing the SYSTEM RESET key will return all of the screen colors to their original values, if you happen to combine text and screen colors that result in vanishing text!

** REPRINTED FROM **
ATARI COMPUTER ASSOCIATION OF ORANGE COUNTY
NEWSLETTER, MAY, 1983

Russell Kavanagh, A.C.A.O.C.

80 Column Display For Your Atari

If you were purchasing a computer primarily for a business application, chances are you would not seriously consider the Atari 800. Since its inception, it has generally served as an entertainment device. No apologies need to be made for this image, since the Atari is one of the best computers anywhere for providing entertainment. It can't be denied, though, that limitations such as low disk storage capacity, a slow disk data transfer rate, and the 40 column display have restricted its acceptance as a business machine. Improvements in all of these areas are being made, thanks to the efforts of independent manufacturers who are marketing Atari-compatible add-ons. One such piece of hardware is the "Full-View 80" 80 column display card, manufactured by the Bit-3 Computer Corporation, Minneapolis, Minnesota. The addition of this card to an Atari 800 will provide an 80 column by 24 line display on a monochrome monitor.

One of the advantages to writing reviews like this is getting a chance to try things out without paying for them! In this case, the Full-View 80 was provided courtesy of Terry Palus from the Sound Room in Anahiem. Also , since I didn't have a monochrome monitor, he let me borrow one. To top it off, he let me borrow a copy of "Letter Perfect", a word processing program. It is now compatible with the 80 column display, so I had a chance to evalute the Full-View 80 in conjunction with a piece of software well-suited to the 80 column display. I hope to review "Letter Perfect" next month.

The Full-View 80 provides an 80 column display for the Atari 800, yet retains the standard Atari character text and graphic modes. A high-density 8 x 10 matrix is used to define the characters, and lower case descenders are provided. The standard character set contains upper and lower case ASCII characters in normal and inverse video plus line graphics. Custom user-defined character sets can be obtained by reprogramming the 2716 EPROM character set. This takes special equipment though, and cannot be done by the average Atari owner.

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Read-only memory (ROM) contained on the Full-View 80 makes the card ready to use from BASIC or machine language, with no need to load drivers or special programs. The screen memory, character set, and driver software are all contained on the card. None of the Atari's memory is used.

The Full-View 80 operates in two modes. The 80 column display can be installed as the system console by executing a simple user call from BASIC. All system commands such as LIST, PRINT, INSERT, DOS, etc. operate just as they do on the 40 column screen, except that you now have 80 columns to work with. The second mode of operation lets you keep the normal 40 column display, and use the Full-View 80 as another system I/O device. Using the OPEN, PRINT #n, and CLOSE commands, it acts like a terminal attached to the Atari.

The Full-View 80 installs in card slot 3, which is the rear-most slot. In order to utilize 48K of memory in your Atari, you need a 32K or greater memory board so that the last slot is available. However, the Full-View 80 will work with any Atari memory configuration. A disk drive is not needed. Of course, the Full-View 80 is not usable with the Atari 400 or the "great" Atari 1200, since no card slot is provided. I should qualify that last statement, since I'm sure some enterprising soul has extended the 400 or 1200 bus to the outside world, but that's not an option available to most users.

A hardware video switch is provided that allows switching between the 40 and 80 column screens under softawre control. Also, anytime a graphics mode other than mode 0 is selected, the normal Atari screen is selected and displayed.

The Full-View 80 is compatible with many of the major Atari 800 software packages. A partial listing of software that will produce an 80 column display includes:

Atari BASIC Cartridge
BASIC A+
Microsoft BASIC
OS/A+
Atari Pascal
Atari Assembler/Editor Cartridge
Atari Macro Assembler (use 40 column for MEDIT)
LJK Letter Perfect (80 column version)
LJK Data Perfect (80 column version)
LJK Edit 6502 (80 column version)

In general, software that uses the standard CIO screen editor is likely to work with the Full-View 80. If a graphics mode other than mode 0 is used such as in the Atari Word Processor or the Atari Text Editor (MEDIT), then the normal 40 column display must be used. I didn't have a copy of either when I evaluted the Full-View 80, but according to the documentation, the normal 40 column screen is automatically selected whenever a graphics mode other than mode 0 is selected. Therefore, if you are in the 80 column mode and you run MEDIT, then the Full-View 80 should automatically select the 40 column mode, and then revert to the 80 column mode when you leave MEDIT.

Now that you know all about the potential of the Full-View 80, I'll go into my impressions of it. The board is very easy to install. You simply lift off the Atari lid, plug the board into the rear-most slot, route the thin ribbon cable out the rear, and replace the computer lid. There is enough clearance between the case and the lid for the cable. Part of the cable plugs into the video monitor jack on the right of the Atari, and the other part of the cable plugs into the monitor. Bit-3 recommends you use a monochrome monitor, as most receivers or color monitors cannot not display the high resolution characters, which is effectively a 640 by 384 display. One problem I discovered is that if you want to utilize the sound output available at the monitor plug, the Bit-3 conector does not provide access to the pins. It would be easy to add a plug to the Bit-3 cable, though.

I used the Full-View 80 primarily with the Atari BASIC cartridge. All of the features worked as described. It was really pleasing to write a program with the 80 column display, especially when it was listed on the screen, since very few lines were continued on the next line. At first the characters looked strange, since they were so much narrower. But after a few minutes, it was the 40 column characters that looked strange! All of the editing features worked identically, with the addition of two new ones. Control-E clears the current line from the cursor to the end of the line, and Control-S clears the

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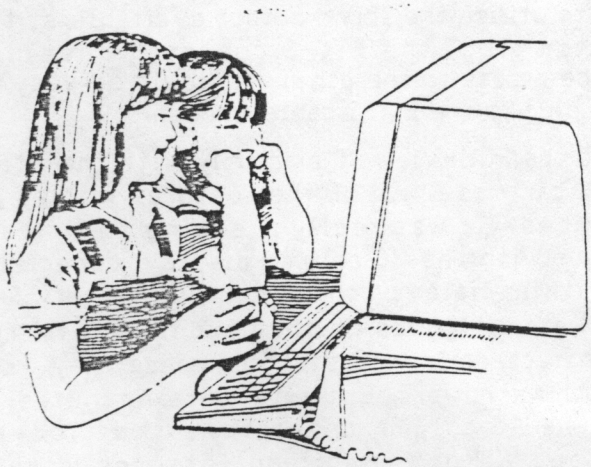
screen from the cursor to the end of the screen. I found these to be very useful. I wrote a demonstration program for display at the March club meeting, and I'm sure most will agree that the quality of the display characters and line graphics gave a very professional look to the Atari.

I also spent some time comparing the 40 column version of "Letter Perfect" with the 80 column version. Without any doubt, the 80 column version was much easier to work with. Being able to see your text in an 80 column format made it easier to edit and format the text, since I had a better idea how it would look when printed. Again, using the 80 column display gave the Atari a professional appearance.

The Full-View 80 is easy to install and even easier to use. A thirty-three page manual provides the details needed to get the average Atari owner on line, as well as information for the advanced user. If you have a need for an 80 column display, then the Full-View 80 provides the features and convenience needed. Unfortunately, hardware add-ons usually aren't cheap, especially low volume speciality items such as this. The list price is $349.00, which is nearly the cost of the just-announced rebated price of the Atari 800!



SOFTWARE REVIEW

KINDER COMP
Product of Spinnaker Software
Reviewed by Keith Steensma
Little Rock Atari Addicts
Bldg. 7, Apt. 139 (Home Sweet Home)
3900 McCain Park
N. Little Rock, AR 72116

For some time now, I have been looking around for an educational program that would teach and entertain my 4 and 6 year old children. But at that age, the program must have just the right balance of graphics, color, and sound to hold their attention long enough for them to learn about the computer. Kinder Comp is a first in my book. The program's author must have children of his own. There are 6 items that can be chosen from the main menu of the program.

The first 3 (DRAW, SCRIBBLE, and NAMES) are just what my younger child needs to learn about joystick and keyboard eye-to-hand coordination.

DRAW is just what the name implies. By pressing the "1" or "2" key and using the joystick, drawings in 2 different line thicknesses can be created. Areas can then be filled in by locating the cursor within the area and pressing the "F" key. The "B" and "W" keys offer a choice between drawing on a white or black background and the joystick button allows selection of the color to draw with.

SCRIBBLE gives the child an interesting way of learning where the keys are located on the keyboard. Just a simple "repeat the character" pressed for a complete screen line. NAMES allows the child to use those keyboard letters for something meaningful. Up to a 15 letter message is whipped, flipped, tossed, and spread all over the screen in a variety of sizes, spots, and colors. Younger and older children and perhaps an adult or two can be challenged and entertained by SEQUENCE, LETTERS and MATCH.

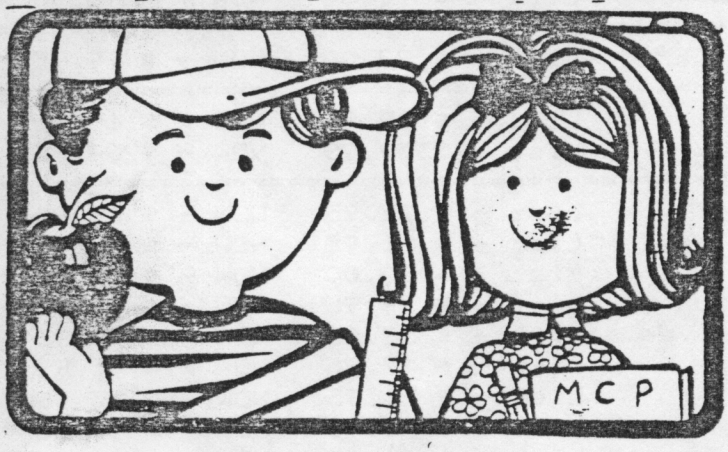
The LETTERS selection challenges the child to press the upper case letter corresponding to the lower case letter that appears on the screen. Five correct answers are rewarded with a sound and color show. SEQUENCE provides a more difficult test of the child's abilities by requiring the entry of the next number in a straight 5 number sequence. A very nicely done test of the child's thought process. By far, the MATCH selection is the best. A pattern is outlined in red and the child must choose an identical pattern marked by a "1", "2", or a "3". Even I have to look twice on some to be sure I am correct. Correct answers are rewarded by a smiling face, while incorrect answers get a frowning face. The patterns are just random enough to prevent any memorizing of sequence.

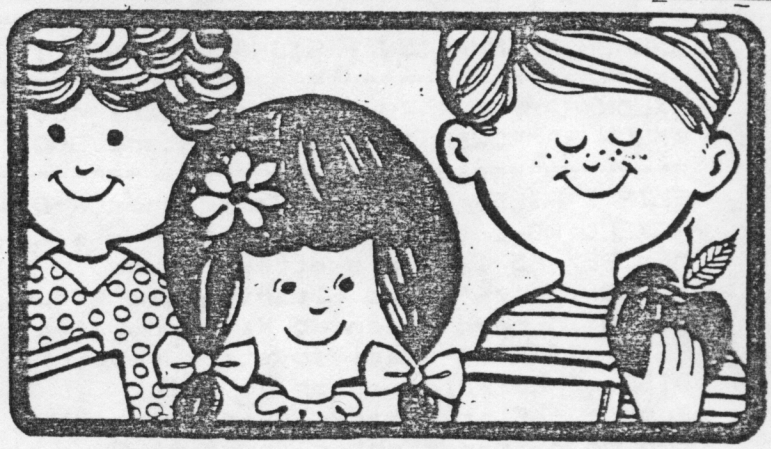
The author's abilities to know what interests a child is outstanding. The system of reward makes the user's learning process enjoyable and entertaining. I highly recommend this program for all children. It's priced at less than $30.00

BACK TO SCHOOL BARGAINS!

STOP

STOP





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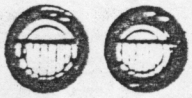

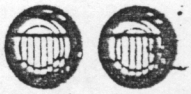

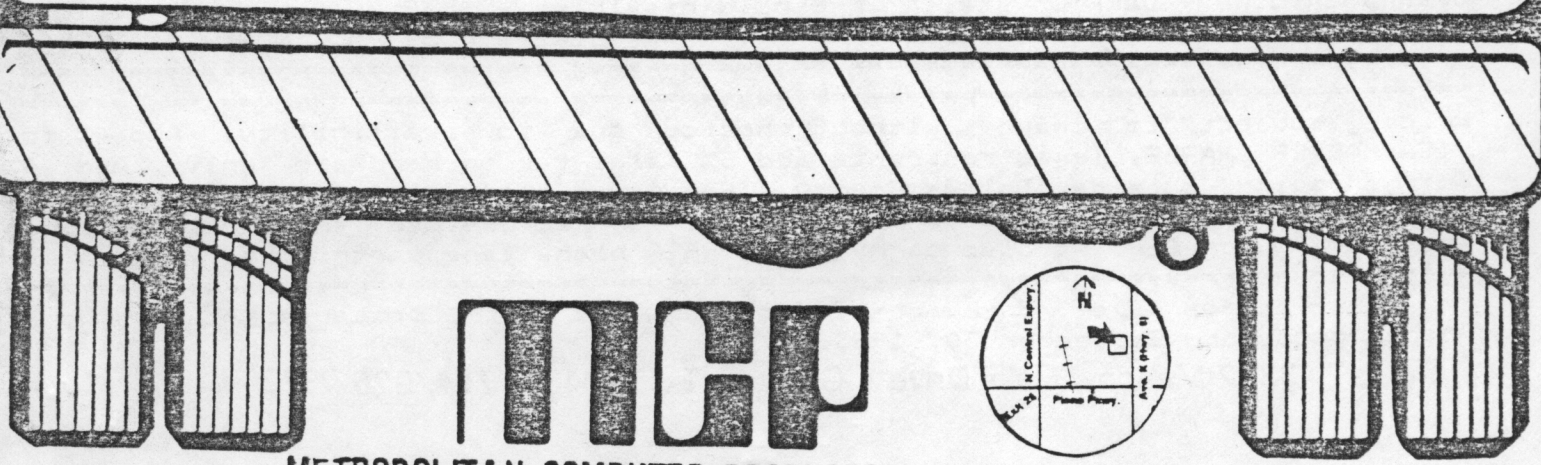

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Prices subject to change without notice due to availibility. Add 4% for VISA/MASTER CHARGE. Texas residents add 5% sales tax on hardware only. Add 4% for shipping outside Dallas County. See us at the next Atari Meeting. Place orders and pick it up there or we will deliver it before the next meeting, whatever you prefer. We also carry VHS & BETA blank tape cartridges.

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---> SIG <---

"SIG" is the acronym for "Special Interest Group". These groups are composed of members having a comacn interest in a specialized area of the general computing field. These specialized areas range from languages, to applications and special features of the ATARI. Join in with one of the groups listed below and get more out of your computer! If you would like to start a new SIG, send your name, phone number, and a description of the subject to *DAL-ACE Newsletter*, 916 E. Berkeley, Richardson, Tx 75081. The information will be published in the next newsletter... you may find that you are not alone in your special computing interest! Deadline for all SIG information is the 15th of the month.

--> FORTH <--

The next FORTH language SIG meeting will be held Sept 8th at 7:30 P.M. in Fred Sagor's home, 1200 Joshua Tree Dr., Plano, Tx 75023. Fred's phone number is 424-0291.

--> BUSINESS <--

The BUSINESS applications SIG is currently looking for more members. If you are interested in applications such as Word Processing, Bookkeeping, Spreadsheets, Accounting, or Other business applications; call Rich Greenlee at 267-7428 (Metro Number) for more information on this SIG.

--> EDUCATION <--

The next meeting of the EDUCATION SIG will be held the Wednesday prior to the regular *DAL-ACE* Saturday meeting at 6:30 P.M. at Sofware Etc., 14400 Dallas Parkway (across from Ewing Buick).

--> YOUNG PEOPLES <--

The YOUNG PEOPLES SIG meets one hour prior to the regular *DAL-ACE* meeting (Lions Den in Garland). This group is composed of our younger members (from 8 to 16 years of age). Contact Chris Magid, 241-7320, for more information.

--> GRAPHICS <--

Members interested in forming a GRAPHICS SIG, please contact Sandra Stephens, 827-0493. This sounds like a great group and a fine time to get in on the ground floor. The ATARI has fantastic graphic capabilities!

--> CP/M <--

The first meeting of the CP/M SIG will be held Monday, Sept 12th, at 7:30 P.M. in the home of Jim Chaney, 916 E. Berkeley, Richardson, Tx 75081. Jim's phone number is 231-4402. The Austin Franklin 80-column board and associated ATR-8000 software will be demonstrated.

** DISCLAIMER **

The articles and advertisements contained in this newsletter reflect the opinion of the respective author. Members are encouraged to offer opposing opinions on any subject (relevant to computing) at any time. We will not, knowingly, publish fraudulent or malicious material. The purpose of this newsletter is to present information for your consideration ... you, the reader, are the final judge on any product or advice presented.

--EDS

NEXT MEETING - OCT 1, 1983

LIONS DEN - 600 N FIFTH ST - GARLAND, TEXAS

DIRECTIONS: From LBJ (635), take the Garland Road exit north; Garland Road will make a "right-hand" turn (about 3 miles north of LBJ) and cross N. FIFTH ST; turn left on FIFTH (going North again); the LIONS DEN will be on the right (about one and a half blocks north of Garland Rd). Guests are WELCOME!!

MEETING AGENDA

NOON TO 2:00	SALES (VENDORS & CLUB)
	DEMONSTRATIONS
	NEWSLETTER DISTRIBUTION
	NEW MEMBER REGISTRATION
	GUEST REGISTRATION
	SOCIALIZING
2:00 TO 2:30	VENDORS CLOSE AND CLEAR
	SET-UP CHAIRS FOR MEETING
2:30 TO 3:00	BUSINESS MEETING
	CLUB SALES
3:00 TO 3:30	GENERAL QUESTIONS
	CLUB SALES
3:30 TO 4:00	TECHNICAL QUESTIONS
	CLUB SALES
4:00 TO 5:00	DEMONSTRATIONS
	CLUB SALES

VENDOR RESERVATIONS

Vendors may reserve *table space* prior to the meeting. Reserved space will be "released" to vendors in attedance at 12:30. Prepaid reservations will not be released. Vendor fee is $10.00 for first table and $5.00 for each additional table. Vendors may start setting up at 12:00. Fee collection and space assignment will occur at that time. Space assignment will be on a "first come, first served" basis, unless prepaid. Vendors should contact Gary Sewell (1-727-6567 in Allen, Texas) for reservations. The current meeting facility allows for approximately 30 vendor tables.

NEWSLETTER ADVERTISEMENTS

Personal Classified ads will be published free of charge for current members. Commercial rates are $35.00 per full page and $25.00 for half a page. Commercial ads must be *camera ready*. The deadline for all ads is the 15th of the month. Mail or deliver copy to DAL-ACE Newsletter, 916 E. Berkeley, Richardson, Texas 75081.

NEWSLETTER CONTRIBUTIONS

All members are urged to submit articles, reviews, programs, or "whatever" for publication. We would like to have something for everyone in each newsletter. That goal is simply impossible if you, the members, remain silent! Please help us. Submissions will be accepted on any stable material not requiring *lead* protection or medical isolation! We prefer submissions on standard floppy disks (any DOS format). We will return your disk as soon as possible with the most delicate of care (last week Sandy carried a floppy disk into the grocery store, rather than leave it in the hot car). We will even take *verbal* reports if you have broken fingers (or other limiting factors). We need material ranging from novice to long-time fanatic, so, let us hear from YOU!

-EDS

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DAL-ACE

DALLAS ATARI COMPUTER ENTHUSIASTS

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Other ATARI user groups may obtain copies of this newsletter on an exchange basis.

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